

WA State Department of Ecology Benthic Invertebrate Voucher Sheet

Species Name Aphelochaeta sp N5

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Date: 6/28/13

Nomenclature	
Phylum	Annelida
Class	Polychaeta
Order	
Family	Cirratulidae
Authority	NAMIT provisional species
Type Locality	
Common Synonyms (S) Previous Names (PN)	

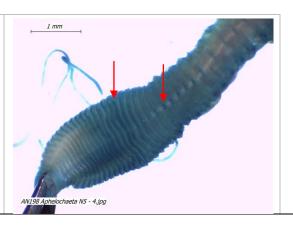
Species Description				
Original Description				
	Prostomium short, conical, pointed. Peristomium cylindrical with three pseudoannulae; palps attached at the posterior margin.			
	Inflated thoracic region with about 25 crowded setigers; dorsum rounded and ventrum nearly flat and glandular. Thoracic parapodia elongate beneath shallow lateral grooves. Median setigers narrower, about as long as wide, cylindrical to slightly beaded.			
	Filiform branchiae present from setiger one, inserted laterally adjacent to the notopodial lobe and limited to the anterior region.			
	All setae slender, capillary, relatively few per fascicle; notosetae length about the width of the median setigers; neurosetae narrower and about half the length of the notosetae. Posterior region with 30-35 crowded, inflated setigers and a ventral groove.			
Additional Description	Pygidium with a small ventral triangular lobe.			

Specimen(s) Examined						
	l	Use Columns	for Multiple S	pecimen Vial I	Number(s)	
Specimen Vial Number	137	197	198	1958	2215	
Project						
Station						
Collection Date						
Collection Depth						
Number of Specimens	5	10	22	3	1	

Species Ha	bitat				
Habitat Type	☐ Intertidal ☐ Subtidal ☐ Ab	yssal			
	Sampling Region (n)	Percent of	Abundance		
Local		Occurrence	Minimum	Maximum	Average
Geographic Distribution	San Juan Islands (30)				
Distribution	E. Strait of Juan de Fuca (30)				
	Admiralty Inlet (30)				
	Strait of Georgia (131)	34.4	1	1573	408.9
	Whidbey Basin (79)	2.5	3	21	12
	Central Sound (301)	9.6	1	346	54.3
	South Sound (72)				
	Hood Canal (51)				
Geographic					
distribution					
according to					
Salinity (ppt)	16 to 32				
Depth (m)	4 to 69.2				
Percent Fines	2.8 to 97				
Total Organic					
Carbon (%)	0.28 to 3.42				
Graphical					
Summaries					

Specimen Diagnostic Chara	acteristics	
Diagnostic Characteristics	Photo, Illustrations	Photo, Illustration Credit
Anterior region inflated with about 25 crowded setigers.	ANI 98 Aphelochaeta NS - 1.jpg	
Filiform branchiae beginning on setiger one and limited to the thoracic region.	AN198 Aphelochaeta NS - 2 Jipg	Marine Sediment Monitoring Team
Ventral groove limited to the posterior ventrum.	AN198 Aphelochaeta N5 - 3,jpg	

Methyl green stain retained on the anterior ventrum, as intersegmental dots on ventrum of thorax, and at bases of neuropodia.



Related Species and Characteristic Differences				
Species Name	Diagnostic Characteristics			
Aphelochaeta monilaris	Body smaller, with fewer setigers in the anterior and posterior inflated regions; median setigers distinctly moniliform; tip of the prostomium retains methyl green stain			
Aphelochaeta sp N6	First branchial pair occurring on the peristomium; median region staining with lateral and ventral spots; posterior thorax and ventral region with transverse staining bands			

Comments/Discussion

This species appears very similar to *Aphelochaeta monilaris* (Hartman, 1960), but it differs in being larger and more robust, having more setigers in the inflated anterior and posterior regions, and lacking the distinctive moniliform shape in the median setigers.

When treated with methyl green, only the anterior ventrum retains stain. Unlike *A. monilaris*, the tip of the prostomium does not turn green. Dr. James Blake in Woods Hole has examined some specimens and concurs that these represent an undescribed species.

Literature

Blake, J.A. 1996. Chapter 8, Family Cirratulidae Ryckholdt, 1851. Pages 263-384. IN: Blake, J.A.; B. Hilbig; and P.H. Valentich-Scott (editors). Taxonomic Atlas of the Benthic Fauna of the Santa Maria Basin and Western Santa Barbara Channel. Volume 6 - The Annelida Part 3. Polychaeta: Orbiniidae to Cossuridae. Santa Barbara Museum of Natural History. Santa Barbara, California. ISBN 0-93649-11-5. [p.330]

Doner, S.A. and J.A. Blake. 2009. Two new species of *Aphelochaeta* (Polychaeta: Cirratulidae) from deep water off northern California. Zoosymposia 2: 127-137. [p. 135]

More information More information about Puget Sound benthic invertebrates is available at: http://www.ecy.wa.gov/programs/eap/sediment/. This document is available on the Department of Ecology's website at https://fortress.wa.gov/ecy/publications/ SummaryPages/1403210.html. If you need this document in a format for the visually impaired, call (360) 407-6764. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call (877) 833-6341.